# JET-X<sub>®</sub> 2 3/4% HIGH-EXPANSION FOAM CONCENTRATE

Data/Specifications



#### DESCRIPTION

- ▶ JET-X® 2 3/4% High-Expansion Foam Concentrate is a synthetic-based formulation comprised of hydrocarbon surfactants, solvents, and stabilizers for use with medium and high expansion foam generators. It is transported and stored as a concentrate to provide ease of use and considerable savings in weight and volume.
- ▶ JET-X 2 3/4% High-Expansion Foam Concentrate can be used to produce foam with expansion ratios ranging from 50:1 to 1000:1 depending upon the type of generator and its operating pressure. It can be proportioned with fresh, salt or hard water. When used with high-expansion generators, recommended proportioning is at 2.75% (2.75 gallons JET-X concentrate with 97.25 gallons water). When used with medium-expansion foam nozzles, it is typically proportioned at a 2% concentration.

#### Typical Physiochemical Properties at 77 °F (25 °C)

Appearance Green Liquid
Density  $1.020 \text{ g/ml} \pm 0.020$ 

pH 7.0-8.5Refractive Index  $1.365 \pm 0.010$ Viscosity  $8 \pm 2$  centistokes



#### APPLICATION

JET-X High-Expansion Foam Concentrate is a tremendously flexible firefighting agent, used in fighting Class A, Class B, and LNG fires both indoors and outdoors. It is used only with air aspirating foam discharge devices except when used as a wetting agent on Class A fuels.

JET-X High-Expansion Foam Concentrate, when used with high-expansion generators, is capable of totally flooding large rooms and enclosures allowing it to effectively extinguish horizontal and vertical (three-dimensional) fires. High-expansion foam is also effective in reducing vapor concentrations downwind from unignited LNG and other hazardous low boiling point gaseous products such as ammonia spills.

When used with medium expansion foam equipment, JET-X High-Expansion Foam Concentrate forms a foam blanket which prevents the release of fuel vapor and also provides additional cooling due to the higher water content. Medium-expansion foam has benefits in outdoor applications because the foam is less affected by wind conditions.

## **PERFORMANCE**

Foaming Properties – The performance of JET-X High-Expansion Foam Concentrate will vary depending upon the performance characteristics of the equipment. Expansion ratios through high-expansion generators are typically between 200:1 and 1000:1. For this reason, it is important for the proper design of a high-expansion system that the JET-X High-Expansion Foam Concentrate be specifically listed with the foam generators. Refer to the performance table listing expansion ratios of JET-X high-expansion generators used in conjunction with JET-X foam concentrate (See JET-X Generator Data Sheet, Form F-93137). Medium-expansion foam generators typically deliver expansion ratios between 50:1 and 200:1.

**Proportioning** – JET-X High-Expansion Foam Concentrate can be proportioned easily at the correct dilution using most conventional proportioning equipment such as:

- Balanced pressure bladder tank type proportioners
- Balanced pressure and in-line balanced pressure pump proportioning equipment
- Fixed or portable in-line venturi (eductor) type proportioners
- Around the pump type proportioners

The minimum and maximum usable temperatures for JET-X High-Expansion Foam Concentrate in this equipment is 35 °F to 120 °F (1.7 °C to 49.0 °C) respectively.

Storage/Shelf Life – When stored in the packaging supplied (polyethylene drums, pails, or totes) and within the temperature limits specified, or in equipment recommended by the manufacturer as part of the foam system, the shelf life of JET-X High-Expansion Foam Concentrate is about 20 − 25 years. If the product is frozen during storage or transportation, thawing will render the product completely usable. Mixing after freeze thaw cycling is recommended.

### **PERFORMANCE (Continued)**

Compatibility – There are no specifications or standards which address the subject of compatibility of different manufacturers brands of multiple expansion foam concentrates. In an emergency or if the manufacturer has supporting test data to substantiate that the mixture meets the same requirements as the individual component concentrates, they may be mixed together in the same storage vessel.

Different types of foam concentrates, i.e., multiple expansion and protein

- ▶ base, should not be mixed under any circumstances. JET-X 2 3/4%
- should not be mixed for use with JET-X 2% concentrate.

Refer to Ansul Technical Bulletin No. 49 addressing acceptable materials of construction for use with ANSUL® foam concentrates.

Inspection – As with any fire extinguishing agent, JET-X High-Expansion Foam Concentrate, whether in the concentrate or pre-mixed form, should be inspected periodically. NFPA 11, "Standard for Low-, Medium-, and High-Expansion Foam Systems," requires that foam concentrate samples be submitted to the manufacturer or other qualified laboratory for quality condition testing at least annually. Contact ANSUL for further information on annual inspection.

## **APPROVALS AND LISTINGS**

JET-X High-Expansion Foam Concentrate is Underwriters Laboratories (UL) Listed and Factory Mutual (FM) Approved with various foam hardware devices.

## **ORDERING INFORMATION**

JET-X High-Expansion Foam Concentrate is available in pails, drums, totes, or bulk shipment.

<b>▶</b>	.l. 0:		Shipping	Oute
Part N	No. Si	ze	Weight	Cube
42000		gallon 9 L) Pail	51 lb (23.1 kg)	1.08 ft <sup>3</sup> (0.0305 cu m)
42000		gallon 08 L) Drum	577 lb (261.7 kg)	11.33 ft <sup>3</sup> (0.3208 cu m)
43117	(1	5 gallon 003 L) te Container	2465 lb (1118 kg)	50.05 ft <sup>3</sup> (1.42 m <sup>3</sup> )
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